This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

Jan Delayal
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delayal@uspto.gov

=> fil rapra FILE 'RAPRA' ENTERED AT 08:24:18 ON 04 JUN 2002 COPYRIGHT (C) 2002 RAPRA Technology Ltd.

FILE LAST UPDATED: 23 MAY 2002 <20020523/UP>
FILE COVERS 1972 TO DATE

>>> The RAPRA Classification Code is available as a PDF file

>>> and may be downloaded free-of-charge from:

>>> http://www.stn-international.de/stndatabases/details/rapra_classcodes.pdf

=> d all tot 1153

L153 ANSWER 1 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:835421 RAPRA FS Rapra Abstracts

TI PERFECT COMBINATION.

SO Plast' 21 No.102, May 2001, p.91/3

ISSN: 1131-7515

PY 2001

DT Journal

LA Spanish

AB A review is made of the types and functions of additives used in plastics, with particular reference to developments in prodegradants, antistatic agents, odorants, special effects pigments and flame retardants. Reference is made to additives produced by a number of companies.

CC 5; 52P; 54F; 56; 59; 59A3

SC *MA; MC; ME; MG; MJ · CT ABS; ADDITIVE; AGREE

ABS; ADDITIVE; AGREEMENT; AGRICULTURAL APPLICATION; AMIDE-ETHER COPOLYMER; ANTI-BLOCKING AGENT; ANTIBLOCKING AGENT; ANTIOXIDANT; ANTISTATIC AGENT; ANTISTATIC PROPERTIES; APPLICATION; AROMA; AUTOMOTIVE APPLICATION; BAG; BIODEGRADABLE; BIODEGRADATION; BIODETERIORATION; BLOCK COPOLYMER; CAR; COMMERCIAL INFORMATION; COMPANIES; COMPANY; COMPOSTABLE; COMPOUND; DATA; DEGRADABLE; DISPOSABLE; ELASTOMER; ELECTRICAL APPLICATION; ELECTRONIC APPLICATION; ELECTRONIC DATA INTERCHANGE; ENVIRONMENT; FABRIC; FILLER; FILM; FILMS; FLAME PROOFING; FLAME RESISTANCE; FLAME RESISTANT; FLAME RETARDANCE; FLAME RETARDANT; FLAMMABILITY; FLOATING COVER; FRAGRANCE; INJECTION MOLDING; INJECTION MOULDING; INTERNET; LIGHT DEGRADATION; LIGHT STABILISER; LIGHT STABILIZER; LUBRICANT; MARKETING; MASTERBATCH; MODIFIER; MULCH; NAPPY; NON-WOVEN FABRIC; ODOR; ODORANT ; ODOUR; OPTICAL PROPERTIES; OXIDATIVE DEGRADATION; PACKAGING; PE; PEARLESCENCE; PHOTOOXIDATIVE DEGRADATION; PHOTOXIDATIVE DEGRADATION; PIGMENT; PLASTIC; PLASTICISER; PLASTICIZER; POLYETHYLENE; POLYMERIC ANTISTATIC AGENT; POLYPROPENE; POLYPROPYLENE; POLYSTYRENE; POLYVINYL CHLORIDE; PP; PRODEGRADANT; PROPERTIES; PROPERTY MODIFIER; PS; PVC; REFUSE BAG; RHEOLOGICAL PROPERTIES; RHEOLOGY; RUBBER; SAN; SPECIAL EFFECTS; SPORTS EQUIPMENT; SPORTS GOODS; STABILISER; STABILIZER; STYRENE ACRYLONITRILE COPOLYMER; SUPPLIER; SYNTHETIC MARBLE; SYNTHETIC WOOD; TECHNICAL; THERMO-OXIDATIVE DEGRADATION; THERMOOXIDATIVE DEGRADATION; THERMOPLASTIC; THERMOPLASTIC ELASTOMER; THERMOPLASTIC RUBBER; TRADE NAME; TRANSPORT APPLICATION; VISCOSITY; VISCOSITY MODIFIER; WOOD; WORLD WIDE WEB

NPT CARBON BLACK; ORGANIC PEROXIDE; PEROXIDE

SHR ADDITIVES, plastics; PRODEGRADANTS, plastics; FLAME RETARDANTS, plastics; ODORANTS, plastics; ANTISTATIC AGENTS, plastics; PIGMENTS, plastics

CO CIBA; CIBA SPECIALTY CHEMICALS; EPI ENVIRONMENTAL PRODUCTS INC.; ATOFINA; CLARIANT; CLARIANT MASTERBATCHES

GT BELGIUM; EUROPEAN COMMUNITY; EUROPEAN UNION; FRANCE; SWITZERLAND; USA; WESTERN EUROPE

TN ENVIROCARE; PEBAX; SPLASH

```
09 / 762396
                                levy -
     ANSWER 2 OF 40 RAPRA
                             COPYRIGHT 2002 RAPRA
      R:823300 RAPRA
                         FS
                             Rapra Abstracts
     GAMBLE BETS ON COCKROACHES.
ΤI
ΑU
      Plastics and Rubber Weekly 6th July 2001, p.9
SO
      ISSN: 0032-1168
PY
      2001
DT
      Journal
LΑ
      English
      Electromag-Neil is producing a cockroach trap, the ExoRoach. The
AΒ
      cockroach is attracted towards the trap by the scent of
      pheromones. An electrically charged wax surface causes the
      insect to lose its footing and it then falls on a sticky panel
      where it is held fast. The product is aimed at the hospitality sector
      where it is not appropriate to use pesticides. ABS, HDPE and
      HIPS are used to manufacture the trap. The company is hoping the trap
      could replace lost Dyson business, after Dyson switched its moulding
      operations from the UK to China. Electromag-Neil's Portsmouth site runs
      29 injection moulding machines, ranging from 35 to 350 tonnes. It has
      recently installed a Mikron high-speed machining centre in order to offer
      its customers shorter lead times on tools.
CC
      06; 831; 6D1
SC
      *CB; SD; QE
     ABS; CLAMP FORCE; CLAMPING FORCE; COCKROACH; COMMERCIAL INFORMATION;
CT
      COMPANIES; COMPANY; DATA; DEVELOPMENT; ECONOMIC INFORMATION;
      ELECTROSTATIC CHARGE; ETHYLENE POLYMER; FINANCE; HDPE; HIGH DENSITY
      POLYETHYLENE; HIGH IMPACT POLYSTYRENE; HIGH IMPACT PS
      ; HIGH SPEED MACHINING; HIGH-IMPACT POLYSTYRENE;
     HIGH-IMPACT PS; INJECTION MOLDING; INJECTION MOULDING;
     INSECT ATTRACTANT; INVESTMENT; LEAD TIME; PEST CONTROL;
      STYRENE POLYMER; THERMOPLASTIC; TOOLING; TURNOVER
```

PLASTIC; POLYETHYLENE; POLYSTYRENE; PRICE; PRODUCT DEVELOPMENT; COMPANY INFORMATION, Electromag Neil, injection moulding, pest

SHR control; INJECTION MOULDING, company information; DOMESTIC EQUIPMENT, injection moulding, pest control

ELECTROMAG-NEIL CO

GT EUROPEAN COMMUNITY; EUROPEAN UNION; UK; WESTERN EUROPE

TN **EXOROACH**

ANSWER 3 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153

FS Rapra Abstracts R:818206 RAPRA ΑN

METHOD AND DEVICE FOR THE CONTINUOUS COAGULATION OF AQUEOUS DISPERSIONS TI OF GRAFT RUBBERS.

Guntherberg N; Hofmann J IN

BASF AG PA

PΙ US 6187825 B1 20010213 US 1999-331416 19990621 ΑI

DE 1996-19654169 19961223 PRAI

DT Patent LA English

B01D017038017038 IC ICM

C08C0011400114; C08J0031600316

A process for the continuous coagulation of aqueous dispersions of graft AΒ rubbers suitable for toughening thermoplastics is described. In the process, dispersions are transported through an apparatus having at least one shear element with a slotted stator and a rotating of the rotor within the stator, so that said dispersions are passed radially from the inside to the outside as a result of the rotation of the rotor in the shear element and, during or after passage through the slots of the rotor and stator, are subjected to such strong shearing that they coagulate, resulting in graft rubber coagulums which can be readily worked up even at a solids content of more than 50% by weight of elastomers.

CC 6121; 95112

and the second management of the second seco

CT APPARATUS; AQUEOUS DISPERSION; COAGULATION; COMPANIES; COMPANY; DISPERSION; ELASTOMER; ELECTRICAL MOTOR; GRAFT COPOLYMER; MECHANICAL PROPERTIES; PLASTIC; RUBBER; SHEAR; SOLIDS CONTENT; STATOR; SYNTHETIC RUBBER; TECHNICAL; THERMOPLASTIC

GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; USA; WESTERN-EUROPE

L153 ANSWER 4 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:817962 RAPRA FS Rapra Abstracts

TI POLYMER COMPOSITIONS IN POWDER FORM.

IN Sack H; Teichmann H; Wistuba E; Angel M; Beckerle W F; Fussl R; Knight J;
Kramer R; Roser J

PA BASF AG

PI US 6143808 A1 20001107 AI 0S 1997-963762 19971104 PRAI DE 1996-19645732 19961106

DT Patent LA English

IC ICM C08K0090000900

AB The invention relates to a pulverulent polymer composition comprising (a) a particulate mineral carrier of high specific surface area and (b) a polymer dispersion applied to the carrier. The invention also relates to a process for preparing this pulverulent polymer composition, to its use for preparing building materials, and to polymer-modified building materials, such as bitumen, dry mortars, powder adhesives, pulverulent coating formulations and filling compounds, all of which comprise such polymer compositions.

CC 622; 63Bu; 6121

CT ADHESIVE; APPLICATION; BUILDING APPLICATION; CEMENT; COATING; COMPANIES; COMPANY; FILLER; MORTAR; PLASTIC; POWDER; TECHNICAL; THERMOPLASTIC; THERMOSET

NPT BITUMEN

GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE

L153 ANSWER 5 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:815663 RAPRA FS Rapra Abstracts

TI PROCESS FOR PRODUCING THERMOPLASTICS.

IN Guntherberg N; Hofmann J; Mailahn E; Ohlig H; Czauderna B; Grabowski S;
Bus K

PA BASF AG

PI US 6165399 A1 20001226

AI US 1999-269344 19990325

PRAI DE 1996-19639465 19960926

DT Patent

LA English

IC ICM B29C0474004740

ICS B29C0476404764; B29C0477604776

A process is disclosed for preparing thermoplastics or polymer ΑB blends comprising (A) from 5 to 95% of a water-moist elastomer component containing up to 60% of residual water, (B) from 5 to 95% of a thermoplastic polymer, (C) from 0 to 95% of a further polymer, and (D) from 0 to 70% of additives, said process comprising mixing the components A to D in an extruder with mechanical dewatering of component A, wherein the extruder has at least two rotating screws and, in the conveying direction, is essentially composed of a metering section into which component A is fed, a squeeze section which serves for dewatering component A and contains a retarding element and an associated dewatering orifice which is present upstream of the retarding element by a distance corresponding to at least one screw diameter, a feed section in which the thermoplastic polymer B is introduced as a melt into the extruder, a plastication section with mixing or kneading elements, a devolatilisation section with an orifice and in which the remaining water is removed as steam, and a discharge zone.

CC 6125; 813; 821

CT ADDITIVE; BLEND; COMPANIES; COMPANY; DEVOLATILISATION; DEVOLATILIZATION; DEWATERING; DISCHARGE; EXTRUDER; FEED ZONE; KNEADING; MACHINERY; MELT; MELTS; METERING; MIXING; MOISTURE REMOVAL; PLASTIC; PLASTICATING; SCREW; SQUEEZING; TECHNICAL; THERMOPLASTIC

NPT STEAM

GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; USA; WESTERN EUROPE

L153 ANSWER 6 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:814160 RAPRA FS Rapra Abstracts

TI THERMOPLASTIC MOULDED MATERIALS BASED ON POLYCARBONATES AND STYRENE/ACRYLONITRILE POLYMERS WHICH CONTAIN COPOLYMERS BASED ON ALKYL (METH) ACRYLATE TO IMPROVE THEIR PROPERTIES.

IN Guntherberg N; Weber M

PA BASF AG

PI US 6174958 B1 20010116

AI US 1998-194128 19981123

PRAI DE 1996-19621733 19960530; DE 1996-19621731 19960530

DT Patent

LA English

IC ICM C08L0690006900 ICS C08L0510405104

These contain polycarbonates, elastomeric graft copolymers, two different thermoplastic copolymers based on styrene or alpha-methylstyrene, copolymers based on alkyl(meth)acrylate and polymeric, hydroxyl-containing compounds.

CC 43C12; 6125; 621

CT BLEND; CARBONATE POLYMER; COMPANIES; COMPANY; GRAFT COPOLYMER; HYDROXY GROUP; HYDROXYL GROUP; METHACRYLATE COPOLYMER; METHACRYLIC ESTER COPOLYMER; METHYL STYRENE COPOLYMER; METHYLSTYRENE COPOLYMER; MOLDING COMPOUND; MOULDING COMPOUND; PLASTIC; POLYCARBONATE; SAN; STYRENE COPOLYMER; STYRENE-ACRYLONITRILE COPOLYMER; TECHNICAL; THERMOPLASTIC

GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; USA; WESTERN EUROPE

L153 ANSWER 7 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:800294 RAPRA FS Rapra Abstracts

TI ESTER-TERMINATED POLYAMIDE GELS.

IN Berger V; Frihart C R; Gordon R L; Heydel J; MacQueen R C; Pavlin M S;
Williams V

PA Union Camp Corp.; Bush Boake Allen

PI US 6111055 A1 20000829

AI US 1997-939034 19970926

DT Patent

LA English

IC ICM C08G0690806908

ICS C08G0731007310; C08L0770007700

An ester-terminated dimer acid-based polyamide may be blended with a solvent to form a gel. The solvent may be flammable, and a wick may be added to the resulting gel to form a candle. Depending on the composition, the candle may be formed into a free standing pillar or may be better suited to being placed in a container. The solvent may be mineral oil. A solid coating may be placed around the candle to enhance the mechanical stability of the gelled body, to eliminate the tendency of a gel to have an oily feel and to accept noticeable fingerprints. The solvent which, in combination with the ester-terminated dimer acid-based polymer forms a gel, may be or include a fragrance material, an insecticide or an insect repellent. A wick may or may not be present in this gel, but in any event, the composition provides for the release of the fragrance, insecticide or insect-repellent.

CC 43C3; 6123; 6F

CT AMIDE POLYMER; CANDLE; COMPANIES; COMPANY; COMPOSITION; DIFFUSION; DIMER; FANCY GOODS; FLAMMABILITY; FRAGRANCE; GEL;

GELS; INSECT REPELLANT; INSECTICIDE; MECHANICAL STABILITY; NYLON; PESTICIDE; PLASTIC; POLYAMIDE; SOLVENT; TECHNICAL; THERMOPLASTIC NPT DIMER ACID; MINERAL OIL GT USA ANSWER 8 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 FS Rapra Abstracts R:753688 RAPRA AN PREPARATION OF THERMOPLASTICS. ΤI Guentherberg N; Hofmann J; Ohlig H; Mailahn E; Bus K; Czauderna B; ΙN Grabowski S PA BASF AG CA Ludwigshafen, Germany US 5958316 A 19990928 PΙ ΑI US 1996-620308 19960322 DT Patent LA English IC ICM B29C047-40 B29C047-76 Toughened thermoplastics are produced by mechanically AΒ dewatering a moist elastomer containing up to 50 wt.% of residual water and mixing the dewatered elastomer with a thermoplastic polymer in a mixing unit. The elastomer is fed to a twin-screw extruder, which has corotating screws and includes, in the transport direction, an unheated metering section, at least one unheated squeeze section for dewatering, which contains at least one retarding element and associated orifice, at least one section for introducing the thermoplastic polymer as a melt into the extruder, at least one section having mixing, kneading or other plasticating elements or combinations thereof, at least one devolatilisation section with an orifice where residual water is removed as steam and a heated discharge zone. Water emerging from the dewatering orifices is present partially or completely in the liquid phase. 6125; 821; 2822 CC SC *OD; SC BLEND; CO-ROTATING; COMPANIES; COMPANY; DEVOLATILISATION; CTDEVOLATILIZATION; DEWATERING; ELASTOMER; EXTRUDER; EXTRUDING; EXTRUSION; EXTRUSION MIXING; KNEADING; LIQUID PHASE; MACHINERY; METERING; MIXING; MOISTURE CONTENT; PLASTIC; RUBBER; SQUEEZING; TECHNICAL; THERMOPLASTIC; TOUGHENED; TWIN-SCREW EXTRUDER; WATER CONTENT NPT BLENDS, extrusion mixing; EXTRUSION MIXING, blends; EXTRUDERS, twin screw SHR EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE GT ANSWER 9 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 R:741197 RAPRA FS Rapra Abstracts ΑN TΙ PREPARATION OF THERMOPLASTICS. Guentherberg N; Hofmann J; Ohlig H; Mailahn E; Bus K; Czauderna B; IN Grabowski S PΑ BASF AG CA Ludwigshafen, Germany US 5910276 A 19990608 PΙ ΑI US 1996-620310 19960322 DE 1995-19511142 19950327 PRAI DTPatent LA English IC ICM B29C047-40 ICS B29C047-76 Toughened thermoplastics are produced by mechanically AB dewatering an elastomer component containing up to 60 wt.% of residual water and mixing the dewatered elastomer component with a

thermoplastic polymer in a twin-screw extruder having corotating,

double flight screws. The extruder includes, in the transport direction,

こうとうなかにおんでくないようにはないとれては、一般には、これには、

THE RESERVE THE PARTY OF THE PA

a metering section, at least one squeeze section for dewatering, which contains at least one retarding element and dewatering orifice associated therewith, at least one section having a conveying screw or mixing, kneading or other plasticating elements or combinations thereof, at least one section in which the **thermoplastic** polymer is introduced as a melt into the extruder, at least one section having mixing, kneading or other plasticating elements or combinations thereof, at least one devolatilisation section with at least one orifice and a discharge zone. Water emerging from the dewatering orifices is present partially or completely in the liquid phase and the extruder operates at a screw speed of from 50 to 600 min/1 and average shear rates of from 20 to 240 s/1. Residual water is removed as steam.

CC 6125; 821; 2822; 819

SC *OD; SC

CT BLEND; CO-ROTATING; COMPANIES; COMPANY; CONVEYING; DEVOLATILISATION; DEVOLATILIZATION; DEWATERING; ELASTOMER; EXTRUDER; EXTRUSION; EXTRUSION MIXING; KNEADING; LIQUID PHASE; MECHANICAL PROPERTIES; MELT; MELTS; METERING; MIXING; MOISTURE CONTENT; PLASTIC; PLASTICISATION; PLASTICIZATION; RESIDUAL WATER; RUBBER; SCREW FLIGHT; SCREW SPEED; SHEAR RATE; SQUEEZING; TECHNICAL; THERMOPLASTIC; TOUGHENED; TWIN-SCREW EXTRUDER; WATER CONTENT

NPT STEAM

SHR BLENDS, thermoplastics, rubbers, devolatilisation, extrusion mixing; EXTRUSION MIXING, blends, thermoplastics, rubbers; EXTRUDERS, twin screw; DEVOLATILISATION, blends, thermoplastics, rubbers

GT EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE

L153 ANSWER 10 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:733183 RAPRA FS Rapra Abstracts

TI PREPARATION OF THERMOPLASTICS.

IN Guentherberg N; Hoffmann J; Mailahn E; Ohlig H

PA BASF AG

CA Ludwigshafen, Germany PI US 5851463 A 19981222

AI US 1996-620259 19960322

DT Patent

LA English

IC ICM B29C047-40 ICS B29C047-76

AΒ Toughened thermoplastics are prepared by mechanically dewatering a water-moist elastomer component A containing up to 50% by weight of residual water and mixing the resulting dewatered elastomer component A with a thermoplastic polymer B in a mixing unit, by a process in which the elastomer component A is fed to a twin-screw extruder which has corotating, in each case triple-flight, screws and essentially includes, in the transport direction: (a) one unheated metering section in which the elastomer component A is fed to the extruder by a metering means; (b) at least one squeeze section which serves for dewatering and contains at least one retarding element and in each case at least one retarding element and in each case at least one associated dewatering orifice; (c) at least one section in which the thermoplastic polymer B is introduced as a melt into the extruder; (d) at least one section provided with mixing, kneading or other plasticating elements or combinations of these elements; (e) at least one devolatilisation section which is provided with at least one devolatilisation orifice and in which the residual water is removed as steam; and (f) unheated discharge zone; and in which the water emerging from the dewatering orifices is present partially or completely in the liquid phase.

CC 81; 821

SC *SB; SC

CT COMPANIES; COMPANY; DEVOLATILISATION; DEVOLATILIZATION; DEWATERING;

levy - 09 / 762396 DIAGRAM; DISCHARGE; ELASTOMER; EXTRUDER; EXTRUDING; EXTRUSION; KNEADING; MELT; MELTS; METERING; MIXING; PLASTIC; PLASTICATING; RUBBER; TECHNICAL; THERMOPLASTIC; TWIN-SCREW EXTRUDER STEAM; WATER PROCESSING, dewatering, extrusion, mixing, devolatilisation, thermoplastics; EXTRUSION, dewatering, mixing, thermoplastics; MIXING, thermoplastics, extrusion, dewatering EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE ANSWER 11 OF 40 RAPRA COPYRIGHT 2002 RAPRA

L153

FS Rapra Abstracts R:729528 RAPRA AN

NON-AQUEOUS CONTROLLED RELEASE PEST AND AIR CARE GEL ΤI COMPOSITION.

ΙN Johnson R L; Morrison D S

Pennzoil Products Co. PA

Houston, Tex., USA CA

US 5871765 A 19990216 PI

US 1997-802775 19970221 ΑI

DT Patent

NPT

SHR

GT

English LA

A01N025-04 IC ICM

A01N025-10; A61K009-10; A61K047-32 TCS

This comprises from about 1 to 50 wt.% of a diblock, triblock, multiblock AB and/or radial block copolymer based on a thermoplastic elastomer, the ratio of block copolymers being variable from about 0 to 100% in either direction. The material to be gelled is a hydrocarbon, one or more hydrocarbon-soluble substances or mixtures thereof, which, based on its physical properties, plays an important part in setting the controlled release rate. The carbon length and an vapour pressure of the hydrocarbon can vary and the controlled release agent or active agent may be one or more air care active substances, such as fragrances, deodorisers, masking agents, pest repellants or pesticides.

CC 6127; 54A; 56; 938

SC *OF; ME; MG; UE

BLOCK COPOLYMER; CHAIN LENGTH; COMPANIES; COMPANY; COMPOSITION; CTCONTROLLED-RELEASE; DEODORISING; DIBLOCK COPOLYMER; DIFFUSION; ELASTOMER; FRAGRANCE; GEL; GELATION; GELLING; GELS; GRAPH; HYDROCARBON; MASKING AGENT; MULTIBLOCK COPOLYMER; NON-AQUEOUS; PEST CONTROL; PESTICIDE; PRESSURE; RADIAL COPOLYMER; RELEASE RATE; TECHNICAL; THERMOPLASTIC ELASTOMER; THERMOPLASTIC RUBBER; TRIBLOCK COPOLYMER; VAPOR PRESSURE; VAPOUR PRESSURE

NPT OIL; OILS

THERMOPLASTIC ELASTOMERS, controlled release, diffusion; DIFFUSION, SHR controlled release, thermoplastic elastomers, pesticides, odorants; PESTICIDES, diffusion; ODORANTS, diffusion

GT USA

ANSWER 12 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153

AN R:724614 RAPRA FS Rapra Abstracts

PREPARATION OF THERMOPLASTICS. TΙ

Guentherberg N; Hofmann J; Mailahn E; Ohlig H; Grabowski S; Czauderna B; IN Bus K

BASF AG PA

CA Ludwigshafen, Germany

PI US 5852113 A 19981222

ΑI US 1996-620309 19960322 DE 1995-19511143 19950327 PRAI

DTPatent

LA English

C08G063-48 IC ICM

AΒ Toughened thermoplastics are prepared by mixing a water-moist elastomer component (A) containing up to 60 wt.% of residual water with a thermoplastic polymer (B) and further polymers (C) and additives (D) in a twin-screw extruder, which has corotating screws, with mechanical dewatering of A. The extruder includes at least one metering section, at least one squeeze section for dewatering A and containing at least one retarding element and at least one associated dewatering orifice, at least one section with mixing, kneading or other plasticating elements or combinations of elements and at least one devolatilisation section where water is removed as steam, and a discharge zone. Components C or D or mixtures thereof, together or separately from one another, are fed to one or more of the extruder sections, either together with A or B or mixtures thereof or separately from A and B.

CC 6125; 821; 2822

SC *OD; SC

CTADDITIVE; BLEND; CO-ROTATING; COMPANIES; COMPANY; DEVOLATILISATION; DEVOLATILIZATION; DEWATERING; DIAGRAM; EXTRUDER; EXTRUDING; EXTRUSION; EXTRUSION MIXING; KNEADING; METERING; MIXING; MOISTURE CONTENT; PLASTIC; RUBBER-MODIFIED; RUBBER-TOUGHENED; TECHNICAL; THERMOPLASTIC; TOUGHENED; TWIN-SCREW EXTRUDER; WATER CONTENT

NPT

EXTRUSION MIXING, thermoplastics, blends; BLENDS, SHR thermoplastics, extrusion mixing; EXTRUDERS, twin screw EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE GT

ANSWER 13 OF 40 RAPRA COPYRIGHT 2002 RAPRA T.153

FS Rapra Abstracts ΑN R:710599 RAPRA

CONTROLLED RELEASE OF AGROCHEMICALS BY POLYMERIC SYSTEMS. TΙ

ΑU

Arranz F (Instituto de Ciencia y Tecnologia de Polimeros) Revista de Plasticos Modernos 75, No.499, Jan.1998, p.38-44 SO ISSN: 0034-8708 CODEN: RPMOAM

1998 PY

Journal DT

LA Spanish

AB An examination is made of various polymeric systems used in the controlled release of agricultural chemicals such as herbicides, insecticides, fertilisers and plant growth regulators. Types of polymers used in these systems and mechanisms involved in the control of release rate are discussed. 49 refs.

CC **63Ag**; 6M3

SC *PC; QM CT

ACRYLIC ACID POLYMER; AGRICULTURAL APPLICATION; AGROCHEMICAL; AMIDE POLYMER; APPLICATION; BIOACTIVITY; BIODEGRADABLE; BIODETERIORATION; BIOERODIBLE; BIOLOGICAL DEGRADATION; BONDING; CAPSULE; CELLULOSE ACETATE; CHAIN SCISSION; CHEMICAL DEGRADATION; CHEMICAL MODIFICATION; CHEMICAL STRUCTURE; CONCENTRATION GRADIENT; CONTROLLED-RELEASE; COVALENT BONDING; CROSSLINKING; CRYSTALLINITY; DATA; DEGRADABLE; DEGRADATION; DEXTRAN; DIFFUSION; DIFFUSION COEFFICIENT; DIFFUSION RATE; DISSOLUTION; ELASTOMER; ELECTROLYTE; ENCAPSULATION; EPM; EQUATION; EROSION; EROSION RATE; ETHYLENE-PROPYLENE COPOLYMER; FERTILISER; FERTILIZER; FICK'S SECOND LAW; FICKIAN; FUNCTIONAL GROUP; GEL; GELS; GRANULE; GRAPH; HERBICIDE ; HYDROGEL; HYDROPHILIC; HYDROPHILICITY; HYDROPHOBIC; HYDROPHOBICITY; INSECTICIDE; INSTITUTION; IONIC BOND; MECHANICAL PROPERTIES; MECHANISM; MEMBRANE; MICROCAPSULE; MIGRATION; MODIFICATION; MOLEC.WT.; MOLECULAR DIFFUSION; MOLECULAR MASS; MOLECULAR STRUCTURE; MOLECULAR WEIGHT; MOLECULAR WEIGHT DISTRIBUTION; MONOLITHIC; MWD; NATURAL POLYMER; NATURAL RUBBER; NON-POROUS; NR; NYLON; PARTICLE SIZE; PARTITION COEFFICIENT; PE; PESTICIDE; PH; PHENOLIC RESIN; PLANT GROWTH REGULATOR; PLASTIC; PMMA; POLYACRYLIC ACID; POLYAMIDE ; POLYETHYLENE; POLYMERIC FERTILISER; POLYMERIC FERTILIZER; POLYMERIC HERBICIDE; POLYMERIC SUPPORT; POLYMETHYL

levy - 09 / 762396 METHACRYLATE; POLYSACCHARIDE; POLYSTYRENE; POLYSULFONE; POLYSULPHONE; POLYURETHANE; POLYVINYL ALCOHOL; POLYVINYL CHLORIDE; POROSITY; PROPERTIES; PS; PU; PVAL; PVC; RELEASE RATE; RUBBER; SCISSION; SIDE GROUP; SOFTENING POINT; SOLUBILITY; STARCH; STYRENE DIVINYLBENZENE COPOLYMER; STYRENE-DIVINYL BENZENE COPOLYMER ; STYRENE-DIVINYLBENZENE COPOLYMER; SULPHONE POLYMER; SURFACE DEGRADATION; SWELLING; TECHNICAL; TEMPERATURE; THERMAL PROPERTIES; THERMOPLASTIC; THERMOSET; TRANSPORT PROPERTIES; UNSATURATED POLYESTER; UREA RESIN; UREA-FORMALDEHYDE RESIN ALGINIC ACID; CHITIN; DICHLOROPHENOXYACETIC ACID; LIGNIN; PHEROMONE; STARCH XANTHATE AGRICULTURAL APPLICATIONS, plastics, controlled release; CONTROLLED RELEASE, plastics, agricultural applications EUROPEAN COMMUNITY; EUROPEAN UNION; SPAIN; WESTERN EUROPE ANSWER 14 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 FS Rapra Abstracts R:710365 RAPRA DEWATERING OF WATER-MOIST GRAFT RUBBER. Guentherberg N; Hofmann J; Ohlig H; Mailahn E; Seitz F; Gausepohl H; Koch J; Deckers A BASF AG Ludwigshafen, Germany US 5817266 A 19981006 US 1996-736439 19961024 DE 1994-4402394 19940127 Patent English B29C047-40 ICM ICS B29C047-76 Water-moist rubber, produced by emulsion polymerisation and precipitation, is mechanically dewatered to give a compact material having a rubber content of at least 50%. The dewatered rubber is fed to the feed section of a twin-screw extruder, which has screws rotating in the same direction and possesses, in succession in the conveying direction, at least two back-up zones and two associated dewatering orifices, each of which may be provided with a retaining screw, and at least one kneading zone, one devolatilisation zone and finally one discharge zone, which may be closed by a die lip. The water separated off is discharged at the dewatering orifices in liquid form. 819 COMPANIES; COMPANY; DEVOLATILISATION; DEVOLATILIZATION; DEWATERING; DIAGRAM; ELASTOMER; EMULSION POLYMERISATION; EMULSION POLYMERIZATION; EXTRUDER; EXTRUDING; EXTRUSION; GRAFT COPOLYMER; KNEADING; MOISTURE CONTENT; POLYMERISATION; POLYMERIZATION; PRECIPITATION; RUBBER; SCREW EXTRUDER; TECHNICAL; TWIN-SCREW EXTRUDER; WATER CONTENT DEWATERING, rubbers EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE ANSWER 15 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 FS Rapra Abstracts R: 665647 RAPRA BIODEGRADABLE SUSTAINED-RELEASE PREPARATION, BIODEGRADABLE PHEROMONE DISPENSER AND BIODEGRADABLE PEST CONTROLLING AGENT. Suzuki H; Sakurada T Japan, Research Assn.for Biotechnology of Agricultural Chemicals Chuo-ku, Tokyo, Japan EP 816430 A2 19980107 AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE;

AL; LT; LV; RO; SI

EP 1997-304644

JP 1996-168898 19960628; JP 1996-168899 19960628; JP 1996-168900 PRAI 19960628

19970627

DTPatent

NPT

SHR

GT

ΑN

TI

ΙN

PΆ CA

PΙ

ΑI

LA

IC

AΒ

CC SC

CT

SHR

GT

AN

ΤI

ΙN

PΑ

CA PΙ

DS

AΙ

PRAI DT

```
LA
     English
IC
     ICM
           C08L067-00
            B65D065-46; A61K009-48; A01N025-18
     The above preparation comprises a mixture of 99 to 10 pbw of an aliphatic
AB
     polyester and 1 to 90 pbw of a modifier for regulating the
     sustained releasability of an active ingredient and the active ingredient
     held by the mixture. The aliphatic polyester is used as a
     sustained release layer for a pheromone contained in the
     dispenser as a liquid phase and a biodegradable pest control agent, which
     is obtained by mixing and dispersing an active ingredient and a carrier
     for holding the active ingredient in a biodegradable aliphatic
     polyester or which comprises 2 to 60 wt.% of an active
     ingredient, 30 to 95 wt.% of a biodegradable aliphatic polyester
     and 2 to 50 wt.% of a carrier for holding the active ingredient.
CC
     43C1; 43D1; 54A; 939; 938
     *ME; UE; KQ; KV
SC
     ADDITIVE; ALIPHATIC; BIODEGRADABLE; BIODETERIORATION; CARRIER;
CT
     CONTROLLED-RELEASE; DEGRADABLE; DIAGRAM; DIFFUSION; DISPENSER;
     DISPERSION; INSTITUTION; LIQUID PHASE; MODIFIER; PEST CONTROL;
     PLASTIC; POLYESTER RESIN; SATURATED POLYESTER;
     TECHNICAL; THERMOSET; UNSATURATED POLYESTER
NPT
     PHEROMONE
SHR
     ESTER POLYMERS, biodegradable, pest control; PEST CONTROL,
     biodegradable, ester polymers, controlled release; DIFFUSION,
     controlled release, ester polymers, pest control;
     BIODEGRADATION, ester polymers, pest control
GT
     JAPAN
     ANSWER 16 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
AN
     R: 656125 RAPRA
                        FS Rapra Abstracts
     CONTROLLED RELEASE OF PERFUMES FROM POLYMERS. II. INCORPORATION
TΙ
     AND RELEASE OF ESSENTIAL OILS FROM GLASSY POLYMERS.
     Peppas N A; Am Ende D J (Purdue University)
ΑU
     Journal of Applied Polymer Science 66, No.3, 17th Oct.1997, p.509-13
SO
     ISSN: 0021-8995
     CODEN: JAPNAB
PY
     1997
DT
     Journal
LA
     English
AΒ
     The release of essential oils from glassy hydrophilic
     copolymers of 2-hydroxyethyl methacrylate and ethylene glycol
     dimethacrylate was investigated for a range of releasing media at a temp.
     of 30C. The release of carvone, limonene and eugenol was studied using
     swelling-controlled release systems based on these copolymers. By
     changing the crosslinking ratio of the copolymers, it was possible to
     achieve zero-order release. The amount of essential oil
     release was correlated with the thermodynamic compatibility of the
     oil-polymer pair, as judged by the difference in solubility
     parameters. 18 refs.
CC
      42C3512A; 6M
      *QM; KK
SC
     APPLICATION; COMPATIBILITY; CONTROLLED-RELEASE; COSMETICS; CROSSLINKING;
CT
     DATA; ETHYLENE GLYCOL DIMETHACRYLATE COPOLYMER; ETHYLENE
     GLYCOL-DIMETHACRYLATE COPOLYMER; GLASSY; GRAPH; HYDROPHILIC;
     HYDROPHILICITY; HYDROXYETHYL METHACRYLATE COPOLYMER;
     INSTITUTION; METHACRYLATE COPOLYMER; METHACRYLIC ESTER
```

NPT CARVONE; EUGENOL; LIMONENE SHR METHACRYLATE COPOLYMERS, perfume controlled release; CONTROLLED RELEASE, perfumes, methacrylate copolymers

COPOLYMER; PERFUME; PLASTIC; SOLUBILITY PARAMETER; TABLES; TECHNICAL; THERMAL PROPERTIES; THERMODYNAMIC; THERMOPLASTIC

GT USA

```
ANSWER 17 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
                         FS Rapra Abstracts
ΑN
     R:649867 RAPRA
      PTS EXPANDS ITS ACCUREL PORTFOLIO.
ΤI
      Plastics and Rubber Weekly No.1705, 26th Sept.1997, p.14
SO
      ISSN: 0032-1168
      1997
PΥ
DT
      Journal
      English
LA
      Plastic Technology Service (PTS) is to expand its range of Accurel
AΒ
     products that it handles for Akzo Nobel to include the range of polymer
      specific fragrance concentrates. These materials are used for
      fragrances in packaging and personal care products.
      Thermally-sensitive liquid additives such as fragrances can be
      absorbed into granules of microporous PE, PP and polyamide to
      give concentrates with up to 70% active ingredient on the polymer
      specific carrier. Akzo Nobel Chemicals is to expand its capacity for
      Ketjenblack super conductive carbon black materials.
CC
      59A3; 56
SC
      *MJ; MG
      ABSORPTION; ADDITIVE; AIR FRESHENER; AMIDE POLYMER;
CT
      ANTI-FOGGING AGENT; CABLE; CARRIER; COATED FABRIC; COMPANIES; COMPANY;
      CONDUCTIVE FILLER; CONTROLLED-RELEASE; DATA; DISTRIBUTION; ELECTRIC
      CABLE; ELECTRICAL CABLE; ELECTRICAL CONDUCTIVITY; ELECTRICAL RESISTIVITY;
      EXTRUDING; EXTRUSION; FABRIC; FILLER; FLOOR; FLOORING; FRAGRANCE
      ADDITIVE; HEAT-SENSITIVE; INSECT REPELLANT; LIQUID
      ADDITIVE; LUBRICANT; MARKETING; MICROPOROUS; MIGRATION; MOLDING;
      MOULDING; MULTI-LAYER; MULTILAYER; NYLON; PACKAGING; PE; PERSONAL CARE
      PRODUCT; PLANT EXPANSION; PLASTIC; POLYAMIDE; POLYETHYLENE;
      POLYMERIC CARRIER; POLYPROPENE; POLYPROPYLENE; POROUS; PP; PROPERTIES;
      STATIC DISSIPATION; SURFACE AREA; SURFACE PROPERTIES; THERMOPLASTIC;
      VOLUME RESISTIVITY
      CARBON BLACK
NPT
      ANTISTATIC AGENTS, carbon black; ODORANTS, polymeric carriers
SHR
      PLASTIC TECHNOLOGY SERVICE
CO
      EUROPEAN COMMUNITY; EUROPEAN UNION; UK; WESTERN EUROPE
GT
      ACCUREL; ARMOSTAT; KETJENBLACK
TN
L153 ANSWER 18 OF 40 RAPRA COPYRIGHT 2002 RAPRA
                         FS Rapra Abstracts
      R: 635406 RAPRA
AN
      COMPARATIVE STUDY OF RELEASE KINETICS OF PHEROMONE FROM POLYMER
ΤI
      DISPENSERS.
      Shailaja D; Ahmed S M; Yaseen M (Indian Institute of Chemical Technology)
ΑU
      Journal of Applied Polymer Science 64, No.7, 16th May 1997, p.1373-80
SO
      ISSN: 0021-8995
      CODEN: JAPNAB
PΥ
      1997
DT
      Journal
LA
      English
      Plasticised PVC dispensers loaded with a fixed concentration of
AB
      gossyplure pheromone were prepared by a solution-casting
      method. The release of pheromone was estimated by using HPLC
      and a gravimetric desorption method. Correlations between diffusion
      coefficient of pheromone and concentration of plasticiser are
      discussed. 20 refs.
      42C382; 63Ag; 6M3; 9351T
CC
SC
      *QM; UE; PC; KM
      AGRICULTURAL APPLICATION; APPLICATION; CALCULATION; CONTAINER;
CT
      CONTROLLED-RELEASE; DATA; DESORPTION; DIFFUSION; DISPENSER; GOSSYPLURE;
      GRAPH; HIGH PERFORMANCE LIQUID CHROMATOGRAPHY; HPLC; INSTITUTION; LIQUID
```

NPT PHEROMONE
SHR DIFFUSION, PVC, pheromone dispensing equipment; CONTROLLED

CHROMATOGRAPHY; MEMBRANE; PACKAGING; PLASTIC; PLASTICISER; PLASTICIZER; POLYVINYL CHLORIDE; PVC; TABLES; TECHNICAL; TEST; THEORY; THERMOPLASTIC

RELEASE, PVC, pheromone dispensing equipment; AGRICULTURAL APPLICATIONS, PVC, pheromone dispensing equipment

GT INDIA

L153 ANSWER 19 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:615621 RAPRA FS Rapra Abstracts

TI POLYMER-SUPPORTED ACETALS AS SYSTEMS FOR PROTECTION AND CONTROLLED DELIVERY OF VOLATILE ALDEHYDES.

AU Ceita L; Gavina P; Lavernia N L; Llopis C; Mestres R; Tortajada A (Valencia, University)

SO Reactive & Functional Polymers 31, No.3, Oct.1996, p.265-72 ISSN: 1381-5148

PY 1996

DT Journal

LA English

AB Polymer-supported acetals were prepared by reaction of hydroxy acetals of decanal with a Merrifield resin, whereas the glycol and related nonyl dioxolane were prepared from a PS resin. Applications in controlled release of pheromones in pest control are mentioned.

11 refs.

CC 42C21; 6M3; 6M4; 9351T

SC *QM; UE; KF

CT CHEMICAL STRUCTURE; CONTROLLED-RELEASE; DATA; DIFFUSION; GRAPH; MOLECULAR STRUCTURE; PEST CONTROL; PLASTIC; POLYMERIC SUPPORT; POLYSTYRENE; PS; TABLES; TECHNICAL; TEST; THEORY; THERMOPLASTIC

NPT DECANAL; HYDROXY ACETAL; NONYL DIOXOLANE

SHR CONTROLLED RELEASE, PS; POLYMERIC SUPPORTS, PS; DIFFUSION, volatile aldehydes, PS

GT EUROPEAN COMMUNITY; EUROPEAN UNION; SPAIN; WESTERN EUROPE

L153 ANSWER 20 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:615071 RAPRA FS Rapra Abstracts

TI DEVICE FOR CONTROLLING INSECTS.

IN Caupin H-J; Leroux R; Guillon M

PA Elf Atochem SA

CA France

PI US 5504142 A 19960402 AI US 1995-434489 19950504 PRAI FR 1994-5685 19940506

DT Patent LA English

IC ICM A01N025-26 ICS A01N025-34

AB A mixture comprising a thermoplastic elastomer, at least one chemical mediator acting on the behaviour of insects and acarids, e.g. a pheromone, kairomone or allomone, and optionally undecylenic acid or derivatives thereof, is particularly useful for treating crops against insects and acarids.

CC 6127; **63Ag**

SC *PC; OF

CT ACARID; AGRICULTURAL APPLICATION; APPLICATION; CHEMICAL MODIFICATION; COMPANIES; COMPANY; CROP PROTECTION; DERIVATIVE; ELASTOMER; INSECT; MODIFICATION; TECHNICAL; THERMOPLASTIC ELASTOMER; THERMOPLASTIC RUBBER

NPT ALLOMONE; KAIROMONE; PHEROMONE; UNDECYLENIC ACID

SHR THERMOPLASTIC ELASTOMERS, crop protection; AGRICULTURAL APPLICATIONS, crop protection, thermoplastic elastomers

GT EUROPEAN COMMUNITY; EUROPEAN UNION; FRANCE; WESTERN EUROPE

L153 ANSWER 21 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:586994 RAPRA FS Rapra Abstracts

TI HYDROPHILIC POLYURETHANES OF IMPROVED STRENGTH.

IN Gould F E; Johnston C W

```
PA
     ·Tyndale Plains-Hunter Ltd.
CA
      Princeton, New Jersey, USA
PΙ
      US 5334691 A 19940802
ΑI
      US 1992-872893 19920423
DT
      Patent
LA
      English
            C08G018-30
IC
      ICM
            A61F002-14
      ICS
      The strength and integrity of hydrophilic polyurethane resins
AΒ
      prepared by reacting a diol component, an organic chain extender and an
      organic diisocyanate are improved by critical selection of the diol
      component, the amount of water in the reaction mixture and the mole
      ratios of the reactants. The diol component is at least one of (a) a long
      chain polyoxyethylene glycol of molecular weight above 2500 and (b) a
      medium chain polyoxyethylene glycol or polyester glycol of
      250-2500 molecular weight. The chain extender is a difunctional compound
      having a molecular weight of less than 250. The amount of water in the
      reaction mixture is 0.5-2.5 wt.% and the urea content of the resins is
      from about 13.6 to 33.7 wt.%. Also described are uses of these
      hydrophilic polyurethane resins as carrier vehicles for various
      active agents including a medicament, fungicide, pesticide,
      insecticide, fertiliser, fragrance, flavour,
      sun-screen, depilatory, cosmetic, contraceptive, anti-fogging agent, hair
      spray formulation and perfume.
      43C6; 95; 53
CC
SC
      *KT; UG; MD
      APPLICATION; CARRIER; CHAIN EXTENDER; CHAIN EXTENSION; CHAIN-EXTENDED;
CT
      COMPANY; DEGREE OF POLYMERISATION; DIAGRAM; GRAPH; HYDROPHILIC;
      MECHANICAL PROPERTIES; MOLECULAR WEIGHT; PLASTIC; POLYESTER
      GLYCOL; POLYMERIC CARRIER; POLYOXYETHYLENE GLYCOL;
      POLYURETHANE; PROPERTIES; PU; STRENGTH; TECHNICAL; THERMOPLASTIC;
      DEGREE OF POLYMERIZATION
SHR
      URETHANE POLYMERS, chain extenders, mechanical properties; CHAIN
      EXTENDERS, PU
GT
      USA
L153
      ANSWER 22 OF 40 RAPRA COPYRIGHT 2002 RAPRA
      R:585285 RAPRA
                         FS Rapra Abstracts
AΝ
TΙ
      AIR FRESHENER AND MOTH AND INSECT REPELLANT PRODUCTS.
IN
      Van Rees N A
PΑ
      Chemia Corp.
CA
      631 Leffingwell, Kirkwood, MO 63122, USA
      Postcode: MO 63122
PΙ
      WO 9514495 Al 19950601
      AT; AU; BB; BG; BR; CA; CH; CZ; DE; DK; ES; FI; GB; HU; JP; KP; KR; LK;
DS
      LU; MG; MN; MW; NL; NO; NZ; PL; PT; RO; RU; SD; SE; SK; UA; BE; FR; GR;
      IE; IT; MC; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG
ΑI
     WO 1993-US11336 19931122
DT
      Patent
LA
      English
IC
      ICM
            A61L009-00
            A01N065-00; A23L001-00; C11B009-00; C08J009-00; C08B031-00
      A biodegradable air freshener, which breaks down in the presence of water
AB
      to minimise solid waste, comprises a water-soluble substrate composed
      mainly of foamed vegetable starch and a liquid fragrance
      carried in the substrate, which is preferably made of corn and/or potato
      starch. The liquid fragrance may be from about 0.01 to 10 times
      the weight of the substrate. A colouring agent may optionally be provided
      in the liquid fragrance to impart colour to the air freshener.
      Because the substrate is made from a water-soluble starch, it dissolves
```

CC 41; 6F SC *QG; KC

in water leaving little or no solid waste.

AND AND AND AND PROPERTY OF THE PARTY OF THE

CT BIODEGRADABLE; COLOURANT; COMPANY; DIAGRAM; FANCY GOODS; FOAM; FRAGRANCE; INSECT REPELLANT; LIQUID; PLASTIC; STARCH; SUBSTRATE; TECHNICAL; WATER SOLUBLE NPT WATER AIR FRESHENERS, starch; STARCH, air fresheners SHR GT USA ANSWER 23 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 ANR:550341 RAPRA FS Rapra Abstracts PROCESS FOR RECLAIMING ELASTOMERIC WASTE. TΙ ΙN Hunt J R; Hall D US 5362759 A 19941108 PΙ US 1994-191820 19940321 ΑI DΤ Patent LA English IC C08J011-04 ICM Elastomeric waste material, particularly rubber, is impregnated with an AB essential oil and then heat treated under reduced pressure with microwave radiation. CC 8.13 SC ELASTOMER; HEAT TREATMENT; IMPREGNATION; MICROWAVE; PRESSURE; RECLAIMING; CT RUBBER; TECHNICAL; WASTE NPT OIL SHR RECLAIMING, rubbers GT USA ANSWER 24 OF 40 RAPRA COPYRIGHT 2002 RAPRA L153 FS Rapra Abstracts ΑN R:545910 RAPRA PARTICULATE GRAFT POLYMER, AND THERMOPLASTIC MOULDING MATERIAL ΤI PRODUCED THEREFROM HAVING IMPROVED TOUGHNESS. Seitz F; Ruppmich K; Guentherberg N; Niessner N IN PΑ BASF AG CA Ludwigshafen, Germany PΙ US 5342898 A 19940830 ΑI US 1993-82165 19930628 PRAI DE 1990-4011163 19900406 DT Patent LA English IC ICM C08F265-02 C08F265-04; C08F271-02; C08F279-02 The graft copolymer comprises (A) from 30 to 80 wt.% of one or more AB elastomeric polymers having a mean particle size of from 30 to 1000 run, comprising (A1) from 85 to 99.8 wt.% of one or more alkyl acrylates having from 1 to 8 carbon atoms in the alkyl radical, (A2) from 0.1 to 5 wt.% of one or more polyfunctional, crosslinking monomers and (A3) from 0.1 to 10 wt.% of one or more monomers containing one or more acid groups or (All) up to 100 wt.% of a diene, (Al2) up to 50 wt.% of one or more vinyl aromatic monomers, (A13) up to 10 wt.% of one or more monomers containing one or more acid groups, as the graft base, and (B) from 20 to 70 wt.% of a shell grafted onto A and comprising (B1) from 50 to 89.9wt.% of one or more vinyl aromatic polymers, (B2) from 10 to 49.9 wt.% of one or more polar, copolymerisable, ethylenically unsaturated monomers

CC 42C3511A; 621

more basic groups.

SC *KK; OG

CT ACID GROUP; ACRYLATE COPOLYMER; AROMATIC; COMPANY; CORE-SHELL; CROSSLINK; DIENE COPOLYMER; ELASTOMER; GRAFT COPOLYMER; MECHANICAL PROPERTIES; MOULDING COMPOUND; PARTICLE SIZE; PARTICULATE; PLASTIC; POLAR; RUBBER; TECHNICAL; THERMOPLASTIC; TOUGHNESS; VINYL COPOLYMER; MOLDING COMPOUND

and (B3) from 0.1 to 10 wt.% of one or more monomers containing one or

NPT MONOMER

```
SHR
      ACRYLATE COPOLYMERS, core shell, moulding compounds;
      MOULDING COMPOUNDS, acrylate copolymers
      EUROPEAN COMMUNITY; EUROPEAN UNION; GERMANY; WESTERN EUROPE
GT
      ANSWER 25 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
                        FS Rapra Abstracts
      R:405446 RAPRA
AN
      CONTROLLED RELEASE PACKAGING FOR THE 21ST CENTURY.
TI.
ΑŲ
      Stevens T
      Materials Engineering 107, No.7, July 1990, p. 19-23
SO
      ISSN: 0025-5319
      CODEN: MAENBO
PΥ
      1990
      Journal
DT
      English
LA
      The applications of controlled release of microencapsulated substances
AB
      are surveyed. The technique of microencapsulation is briefly described.
      Their utilisation in adhesives, insecticides, lubricants,
      fragrances, health core products, medicine and horticulture. PVA,
      EVA, polyureas, silicone-rubber and cellulose acetate are some of the
      plastics employed.
CC
      6P; 6S.13; 6A1
SC
      *QO; QQ; QB
      APPLICATION; CELLULOSE ACETATE; CONTROLLED RELEASE; CONTROLLED-RELEASE;
CT
      ENCAPSULATION; ETHYLENE-VINYL ACETATE COPOLYMER; EVA; MICROENCAPSULATION;
      PACKAGING; PACKAGING APPLICATION; PHARMACEUTICAL APPLICATION; PLASTIC;
      POLYUREA; PVA; RUBBER; SILICON ELASTOMER; SILICONE RUBBER; TECHNICAL;
      THERMOPLASTIC
      PHARMACEUTICAL APPLICATIONS, controlled release; CONTROLLED RESLEASE,
SHR
      applications; PACKAGING, controlled release
GT
      USA
      ANSWER 26 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
      R:339997 RAPRA
                         FS Rapra Abstracts
AN
      PLASTICS HAVING SWEET SMELL TO BE SOLD.
ΤI
      Japan Chemical Week 28, No. 1423, 16th July 1987, p. 3
SO
      ISSN: 0047-1755
      CODEN: JCHWAC
      1987
PΥ
      Journal
DT
LA
      English
AΒ
      Hexachemical Co. have succeeded in mixing cyclodextrin (with added
      fragrances and insecticides) with PE and PP and without
      heating, allowing products to be manufactured with a sweet and
      insecticidal effect. Celluresin (brand name) will be sold by
      Itocho System Corporation and produced at Hexachemical's Yodogawa factory
      in Osaka.
CC
      56
SC
      *MG
      COMPANY; COMPANIES; FRAGRANCE ADDITIVE; INSECTICIDE;
CT
      ODORANT; ODOUR; PE; ETHYLENE POLYMER; PLASTIC; PP;
      PROPYLENE POLYMER; PRODUCT ANNOUNCEMENT; SHORT ITEM; THERMOPLASTIC
NPT
      CYCLODEXTRIN; CYCLODEXTRINS
SHR
      ODORANTS
      HEXACHEMICAL CO.; ITOCHU SYSTEM CORP.
CO
GT
      JAPAN
TN
      CELLURESIN
      ANSWER 27 OF 40 RAPRA COPYRIGHT 2002 RAPRA
ΑN
      R: 333325 RAPRA
                         FS Rapra Abstracts
      CYCLODEXTRIN-APPLIED PLASTIC PRODUCTS COMMERCIALISED.
ΤI
      Japan Chemical Week 28, No. 1410, 9th April 1987, p. 3
SO
      ISSN: 0047-1755
      CODEN: JCHWAC
```

levy -09 / 762396 PΥ 1987 DT Journal LA English AB The production and marketing of quest materials - containing plastic products using cyclodextrin, is discussed. The quest materials include flavours/fragrances, insecticides, anti-mould agents and deodorants. These are combined with the cyclodextrin and kneaded with a synthetic resin to form pellet-like masterbatch for sheeting and injection mouldings. The production facilities and sales targets for these cyclodextrin-applied plastic products, are outlined. CC 6A6 SC *QB ANTIMICROBIAL AGENT; BINDER; COMMERCIAL INFORMATION; COMPANY; COMPANIES; CT COMPOUNDING; ENCAPSULATION; FLAVOUR; FLAVOUR RELEASE AGENT; INSECTICIDE; MASTERBATCH; PERFUME; PLASTIC; PRODUCT ANNOUNCEMENT; RESEARCH; SALES; SCENTED PLASTIC; SHORT ITEM NPT CYCLODEXTRIN; CYCLODEXTRINS BINDERS, flavours, scented plastics, insecticides SHR CO ITOH C., & CO.LTD. GT JAPAN L153 ANSWER 28 OF 40 RAPRA COPYRIGHT 2002 RAPRA ΑN FS Rapra Abstracts R:315300 RAPRA ΤI PROCESS FOR INFUSING PLASTICS WITH UNCOMMON SUBSTANCES. SO Plastics News (Australia) March 1986, p. 7 PY 1986 DΨ Journal LA English AB PA Technology has discovered an effective means of infusing solids or micro-porous membranes (such as plastics) with materials by reversing the supercritical process. The potential uses within the plastics industry are indicated. The physical properties of some materials can be altered in the process, giving, for example, greater strength to synthetic fibres, and a wide range of additives can be introduced into plastics for use as controlled release products. CC 6M3 SC CTADDITIVE; COLOURAT; COMPANY; COMPANIES; CONTROLLED-RELEASE; DIFFUSION; FERTILISER; FRAGRANCE; INFUSION; IMPREGNAT; INSECTICIDE ; LUBRICANT; MEMBRANE; MODIFICATION; PERFUME; PHYSICAL PROPERTIES; PLASTIC; PROPERTY MODIFIER; SUPERCRITICAL FLUID; FERTILIZER INFUSION, plastics; CONTROLLED RELEASE SHR CO PA TECHNOLOGY GT AUSTRALIA ANSWER 29 OF 40 RAPRA COPYRIGHT 2002 RAPRA ΑN R:220872 RAPRA FS Rapra Abstracts TΙ NEW ACCUREL POWDERS PROVIDE CONTAINMENT AND CONTROLLED RELEASE. CS

SO Rubber World 183, No. 5, Feb. 1981, p. 51

> ISSN: 0035-9572 CODEN: RVBWAQ

PΥ 1981

Journal DT

LA English

AB Accurel polymer powders, produced by the above company, have microporous structures of spherical interconnected void spaces made from a variation of thermoplastics having cell and pore size distribution. The cells may be loaded with such active ingredients as drugs, pesticides, insecticides and fragrances for controlled release. Standard powders contain 75% void and are made of PP with typical particle sizes of less than 100 microns.

CC 622; 6M3 CT AGRICULTURAL APPLICATION; VOID; WETTING; MEDICAL APPLICATION;

CELL SIZE; INSECTICIDE; DRUG RELEASE; PERFUME; CELL

STRUCTURE; WETTING AGENT; PLASTIC; THERMOPLASTICS; CONTROLLED RELEASE; COMPANY; SOLVENT; PARTICLE SIZE; POLYMER; POWDER; PORE SIZE; PORE SIZE

DISTRIBUTION; MICROPOROSITY; PP; PORE STRUCTURE

NPT KETONE; PESTICIDE; ALCOHOL

SHR POWDERS; CONTROLLED RELEASE

CO ARMAK CO.

GT USA

TN ACCUREL

L153 ANSWER 30 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:219022 RAPRA FS Rapra Abstracts

TI PROSPECTS FOR CONTROLLING FOREST LEPIDOPTERA WITH CONTROLLED RELEASE PHEROMONE FORMULATIONS.

AU Daterman G E; Sartwell C; Sower L L

Controlled Release of Bioactive Materials. Based on the Symposium at the 6th International Meeting of Controlled Release Society; ed.by R.Baker New Orleans, La., August 1979, p. 213-26. R.ROOM. 6S(13)

PY 1979

DT Conference Article

LA English

AB Pheromone-based methods to control some forest pests are described. 21 refs.

CC **63Aq**; 6M3

CT FORMULATION; AGRICULTURE; PEST CONTROL; BIOCIDE; CONTROLLED RELEASE

NPT PESTICIDE; PHEROMONE

L153 ANSWER 31 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:219021 RAPRA FS Rapra Abstracts

TI EXPERIENCE IN USING HOLLOW FIBRE CONTROLLED RELEASE FORMULATION IN PHEROMONE MEDIATED SUPPRESSION OF PECTINOPHORA GOSSYPIELLA UNDER HUMID TROPICAL CONDITIONS.

AU Brooks T W; Doane C C; Osborn D G; Haworth J K

Controlled Release of Bioactive Materials Based on the Symposium at the 6th International Meeting of Controlled Release Society;ed.by R.Baker New Orleans, La., August 1979, p. 227-36. R.ROOM. 6S(13)

PY 1979

DT Conference Article

LA English

AB A hollow fibre controlled release formulation is shown to be effective in controlling cotton pests. 14 refs.

CC **63Ag**; 6M3

CT BIOCIDE; **PEST CONTROL**; **AGRICULTURE**; COTTON; FORMULATION; FIBRE; CONTROLLED RELEASE; FIBER

NPT PHEROMONE; PESTICIDE

L153 ANSWER 32 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:215983 RAPRA FS Rapra Abstracts

TI CONTROLLED VAPOR RELEASE FROM HOLLOW FIBRES: THEORY AND APPLICATIONS WITH INSECT PHEROMONES.

AU Brooks T W

Controlled Release Technologies: Methods Theory and Applications. Vols.1 & 2;ed.by A.F.Kydonieus Boca Raton, Fla., CRC Press Int., 1980, Vol.2, p.165-193. R.ROOM. 6S (13)

PY 1980

DT Conference Article

LA English

AB A review is given of the controlled release of vapourisable materials from hollow fibres. Details are given of the mass transport theory involved in hollow fibre controlled release devices, general features of these devices and practical applications of the concept to pest control

The second specifical sections of the second second

The state of the s

```
with insect pheromones. 43 refs.
CC
      62.14; 6M3
CT
      PETP; OXYETHYLENE COPOLYMER; OXYMETHYLENE COPOLYMER; FIBRE; CONTROLLED
      RELEASE; REVIEW; AGRICULTURAL APPLICATION; FIBER; PET
NPT
      PESTICIDE
     ANSWER 33 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
      R:207613 RAPRA
                         FS Rapra Abstracts
ΑN
      PLASTIC RELEASE MARKETED.
TΤ
CS
      Delta Ventures
SO
      Chemical Marketing Reporter 221, No., 12, 22nd March 1982, p. 23
      ISSN: 0090-0907
      CODEN: CMKRA5
PΥ
      1982
DT
      Journal
LA
      English
AΒ
      The company has introduced a newly-patented device for controlling the
      speed at which perfumes, insecticides and other
      volatile substances evaporate. Known as Vapor-trol, the device consists
      of a thin, lightweight, liquid-proof plastic pouch which allows one or
      more volatile chemicals to diffuse at controlled rates into the air. An
      easily removed outer wrapper, such as aluminium foil, seals the contents
      until ready for use.
CC
      06
CT
      PLASTIC; COMMERCIAL INFORMATION; CONTROLLED RELEASE; COMPANY; FOIL
NPT
      ALUMINIUM; ALUMINUM
CO
      DELTA VENTURES
      VAPOR-TROL
TN
     ANSWER 34 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
ΑN
      R:171885 RAPRA
                         FS Rapra Abstracts
      MICROPOROUS POLYMER.
ΤI
CS
      Armak Co.
SO
      Elastomerics 113, No. 6, June 1981, p. 81
      ISSN: 0146-0706
      CODEN: ELASDA
PΥ
      1981
DT
      Journal
LA
      English
AΒ
      Brief details are presented on Accurel, microporous polymers from the
      above company for controlled release of drugs, pesticides,
      insecticides and fragrances. Initially the Accurel
      powders will be made of PP.
CC
      6M3
CT
      POLYMER; PORE SIZE; MICROPOROSITY; POWDER; PP; THERMOPLASTIC; COMPANY;
      CONTROLLED RELEASE; PERFUME; DRUG RELEASE; INSECTICIDE
      ; CELL SIZE
NPT
      PESTICIDE
CO
      ARMAK CO.
TN
      ACCUREL
      ANSWER 35 OF 40 RAPRA COPYRIGHT 2002 RAPRA
L153
      R:167006 RAPRA
                         FS Rapra Abstracts
ΑN
ΤI
      NEW ACCUREL POWDERS PROVIDE CONTAINMENT AND CONTROLLED RELEASE.
CS
      Armak Co.
SO
      Rubber World 183, No. 5, Feb. 1981, p. 51
      ISSN: 0035-9572
      CODEN: RVBWAQ
PΥ
      1981
DT
      Journal
      English
LA
```

Accurel a patented polymer material offers a special combination of

properties which include microporous structures of spherical

AB

interconnected void spaces made from a variation of thermoplastics having cell and pore size distribution. The cells can be loaded with active ingredients such as drugs, pesticides, insecticides and fragrances. Standard Accurel powders contain 75% void and be made of polypropylene with typical Accurel powder particles.

CC 42C12; 622; 6M3

CT POLYMER; PORE SIZE; PORE SIZE; POWDER; POLYPROPYLENE; SPHERULITIC; THERMOPLASTICS; VOID; PATENT; CONTROLLED RELEASE; DRUG RELEASE; INSECTICIDE

NPT **PESTICIDE** CO ARMAK CO.

GT USA

TN MICROPOROUS; ACCUREL

- L153 ANSWER 36 OF 40 RAPRA COPYRIGHT 2002 RAPRA
- AN R:101990 RAPRA FS Rapra Abstracts
- TI CONTROLLED RELEASE POLYMERIC FORMULATIONS. SYMPOSIUM AT 171ST MEETING OF ACS, NEW YORK, APRIL 7-9, 1976. ACS SYMPOSIUM SERIES 33.
- AU PAUL D R; HARRIS F W
- CS ACS, DIV.OF ORGANIC COATINGS & PLASTICS CHEMISTRY; ACS, DIV.OF POLYMER CHEMISTRY
- SO EDS. WASHINGTON, D.C., 1976. #15.50. 9ins. 4/3/77. CONFER. 6M3
- PY 1976
- DT Conference
- LA English
- THE ROLE OF THE POLYMER AS A RATE CONTROLLING DEVICE, CONTAINER, OR CARRIER FOR THE AGENT TO BE RELEASED IS EMPHASISED IN THIS SUMMARY OF PRESENT ACTIVITIES IN THE FIELD OF CONTROLLED-RELEASE TECHNOLOGY. THESE INCLUDE MEDICAL APPLICATIONS, SUCH AS CONTRACEPTION, FORMULATIONS TO DELIVER NARCOTIC ANTAGONISTS, FLUORIDE FOR DENTAL PURPOSES AND DRUGS TO COMBAT CANCER AND CARDIAC ARRHYTHMIA. THE CONTROL OF PESTS SUCH AS SNAILS, WEEDS, MARINE FOULING ORGANISMS, ETC. THROUGH THE RELEASE OF TOXICANTS OR PHEROMONES IS DISCUSSED. A DESCRIPTION IS GIVEN OF THE DIFFERENT TYPES OF DEVICES INVOLVED. DIFFUSION AND SOLUBILITY CHARACTERISTICS, COMPATIBILITY AND STABILITY IN THE ENVIRONMENT, COMPATIBILITY WITH THE ACTIVE AGENT AND MECHANICAL PROPERTIES, ARE ALL FACTORS TO BE CONSIDERED FOR SELECTION OF THE APPROPRIATE POLYMER.
- CC 6M3
- CT FIBRE; NYLON; POLYMER; SILICONE POLYMER; SOLUBILITY; DIFFUSION; MECHANICAL PROPERTIES; MEDICAL APPLICATION; MICROCAPSULE; CELLULOSE TRIACETATE; AGRICULTURAL APPLICATION; CELLULOSE ACETATE BUTYRATE; CONTROLLED-RELEASE; FIBER
- CO ACS, DIV. OF POLYMER CHEMISTRY; ACS, DIV. OF ORGANIC COATINGS & PLASTICS CHEMISTRY
- L153 ANSWER 37 OF 40 RAPRA COPYRIGHT 2002 RAPRA
- AN R:100172 RAPRA FS Rapra Abstracts
- TI CONTROLLED-RELEASE OF **PHEROMONES** THROUGH MULTI-LAYERED POLYMERIC DISPENSERS.
- AU KYDONIEUS A F; SMITH I K; BEROZA M
- SO ACS, DIV. OF ORGANIC COATINGS & PLASTICS CHEMISTRY COATINGS PLAST. PREPRINTS, 36, No.1, Apr. 1976, p. 458-60. CONFER.
- PY 1976
- DT Conference Article
- LA English
- AB BIOCIDE; AGRICULTURAL APPLICATION.
- CC **63AG**; 54A
- CT LAMINATE; AGRICULTURAL APPLICATION; PLASTIC; BIOCIDE; CONTROLLED-RELEASE
- L153 ANSWER 38 OF 40 RAPRA COPYRIGHT 2002 RAPRA
- AN R:76815 RAPRA FS Rapra Abstracts
- TI MICROCAPSULES EQUIVALENT TO BE 841648.

PA BAYER AG

SO PR.10.5.75(2520892)(DT)PUBL.25.10.78

PI GB 1529517

DT Patent

LA English

AB COMPRISE A CENTRAL CORE AND A SHELL OF A FILM-FORMING POLYCARBODIIMIDE.
THE CORE MATERIAL MAY BE MINERAL OR FATTY OILS, TRICHLOROETHYL PHOSPHATE,
THIOPHOSPHORIC ACID ESTERS, ETHOXYLATED ALKYL PHENOLS,
PERFUMES, HYDROCARBONS, INKS, SOLUTIONS, TITANIUM DIOXIDE,
METHYLENE BLUE, CRYSTAL VIOLET OR CARBON BLACK. THE MICROCAPSULES MAY
CONTAIN PESTICIDES, FLAME PROOFING AGENTS, INKS, OILS,
PERFUMES, PIGMENTS, DYES, PLASTICISERS OR CATALYSTS.

CC 6P; 7

CT PIGMENTS; PLASTICISERS; FLAME RETARDANT; POLYMERISATION CATALYST; DYES; MICROCAPSULE; CORE; POLYCARBODIIMIDE; COMPANY; POLYMERIZATION CATALYST

NPT CARBON BLACK; TITANIUM DIOXIDE; METHYLENE BLUE

CO BAYER AG

L153 ANSWER 39 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:66125 RAPRA FS Rapra Abstracts

TI MICROPOROUS FILM FOR CONTROLLED-RELEASE APPLICATIONS.

CS MOLECULON RESEARCH CORP.

SO Materie Plastiche ed Elastomeri No.8, Aug.1976, p.612-5 ISSN: 0025-5459 CODEN: MPELAK

PY 1976

DT Journal

LA Italian

THE ABOVE COMPANY HAS DEVELOPED A CELLULOSE TRIACETTE FILM, NAMED PROPLASTIC, WHICH IS OF MICROPOSOUR STRUCTURE AND CAPABLE OF ABSORBING 90% OF ITS WEIGHT OF LIQUIDS WHICH CAN BE RELEASED AT A CONTROLLED RATE. CONSIDERATION IS GIVEN TO THE STRUCTURE OF THE FILM AND ITS APPLICATIONS IN MICROENCAPSULATION AND CABLE INSULATION. THE MATERIAL IS ALSO AVAILABLE IN THE FORM OF MICROSPHERES AND POWDERS, NAMED SUSTRELLE, FOR CONTROLLED RELEASE OF PHARMACEUTICALS, COSMETICS, PERFUMES, PESTICIDES, DEODORANTS, ETC. A TABLE GIVES TYPICAL PROPERTIES OF A POROPLASTIC FILM IMPREGNATED WITH WATER.

CC 41D2; 6124; 625; 6P; 6E1; 622

CT MICROENCAPSULAT; FILM; POROUS; POWDER; WATER ABSORPTION; MICROCAPSULE; CELLULOSE TRIACETATE; AGRICULTURAL APPLICATION; ABSORPTION; CABLE INSULATION; SURFACE STRUCTURE; LIQUID; PROPERTIES; ITALIAN; PHARMACEUTICAL APPLICATION; CONTROLLED-RELEASE

CO MOLECULON RESEARCH CORP.

TN PROPLASTIC; SUSTRELLE

L153 ANSWER 40 OF 40 RAPRA COPYRIGHT 2002 RAPRA

AN R:49170 RAPRA FS Rapra Abstracts

TI MICROPOROUS PLASTICS PROMISE A NEW ERA IN FILTRATION.

AU CONWAY F

SO Plastics Engineering 31, No.2, Feb.1975, p.20-3 ISSN: 0091-9578 CODEN: PLEGBB

PY 1975

DT Journal

LA English

DEVELOPMENTS IN MICROPOROUS POLYMERIC FILMS AND BEADS, AND APPLICATIONS OF THESE MATERIALS AS FILTRATION MEDIA IN CHEMICAL AND FOOD PROCESSING, WATER PURIFICATION AND BIOMEDICAL EQUIPMENT, ARE DESCRIBED. OTHER APPLICATIONS FOR MICROPOROUS PLASTICS INCLUDE THE ENCAPSULATION OF OILY OR VOLATILE ORGANIC MATERIALS FOR GRADUAL, SUSTAINED RELEASE OF FRAGRANCE, FLAVOURS, MEDICINES AND PESTICIDES. A TABLE IS INCLUDED COMPARING THE PROPERTIES OF MICROPOROUS FILMS BASED ON PVC (AMERACE), PP (CELGARD), POLYCARBONATE (NUCLEPORE) AND

```
CELLULOSE TRIACETATE (POROPLASTIC). MENTION IS MADE OF MOULDED PARTS MADE OF POROUS PLASTICS BY POREX MATERIALS CORP.; THESE INCLUDE LDPE, HDPE, PE, PP AND POLYVINYLIDENE FLUORIDE SHEETS, TUBES AND MOULDED PARTS.
```

CC 6124; 6M

CT ENCAPSULATION; HDPE; LDPE; PE; FILMS; POLYCARBONATE; POROSITY; PP; SHEET; PVC; TUBES; WATER TREATMENT; MEDICAL APPLICATION; POLYVINYLIDENE FLUORIDE; CELLULOSE TRIACETATE; FOAM; PLASTIC; FILTRATION; FILTER

CO POREX MATERIALS CORP.

TN CELGARD; POROPLASTIC; AMERACE; NUCLEPORE

=> d his

(FILE 'HOME' ENTERED AT 06:49:37 ON 04 JUN 2002) SET COST OFF

```
FILE 'RAPRA' ENTERED AT 06:53:28 ON 04 JUN 2002
              40 S ESSENTIAL(L)OIL
L1
L2
               6 S ESSENTIAL OIL
L3
               6 S L1 AND L2
                 SEL AN 3 4
               2 S E1-E2 AND L3
L4
            266 S PERFUM?
L5
                 E PHEROMO
L6
            · 14 S E4, E5
                 E ECOMON
                 SEL AN 4-14
              11 S L6 AND E1-E11
L7
              13 S L4, L7
rac{1}{8}
              1 S L5 AND L8
L9
L10
              13 S L8, L9
               9 S L5 AND PESTICID?
L11
                 SEL AN 3 6-9
L12
              5 S L11 AND E12-E16
L13
              11 S L5 AND INSECT?
                 SEL AN 2 6 7 8
              4 S L13 AND E17-E20
L14
              20 S L10, L12, L14
L15
L16
              20 S L5 AND (AGRO? OR AGRI?)
                 SEL AN 19 20
               2 S L16 AND E21-E22
L17
              20 S L15, L17
L18
            179 S FRAGRAN?
L19
L20
              28 S L19 AND (PESTIC? OR INSECT? OR AGRO? OR AGRI?)
                 SEL AN 2 5 8 9 15 16 19 20 21 22 23 25 26 27 28
L21
              15 S L20 AND E23-E37
L22
             31 S L18, L21
            970 S ODOR?
L23
L24
              32 S L23 AND (PESTIC? OR INSECT? OR AGRO? OR AGRI?)
                 SEL AN 26 27 28 28
               3 S L24 AND E38-E40
L25
                 SEL AN L24 29
L26
              1 S L24 AND E41
L27
              33 S L22, L25, L26
L28
           1772 S ODOUR?
              42 S L28 AND (PEST OR PESTIC? OR INSECT? OR AGRO? OR AGRI?)
L29
                 SEL AN 36
              1 S L29 AND E42
L30
              33 S L27, L30
L31
L32
              1 S L5, L19, L23 AND PEST
              33 S L31,L32
L33
                 E AGRICULTURAL APPLICATION/CT
```

```
E E3+ALL
L34
           4137 S E2, E3
                 E E 8+ALL
                 E AGRICULTURE/CT
                 E E3+ALL
L35
            530 S E1
                 E 63/CC
           2300 S E11
L36
                 E AGROCHEMICAL/CT
L37
            306 S E3
                 E INSECT/CT
L38
            217 S E3-E9
                 E PEST/CT
L39
            463 S E4, E5
                 E E5+ALL
L40
            296 S E2, E3, E4, E5
             82 S L1, L2, L5, L6, L19, L23, L28 AND L34-L40
L41
L42
             26 S L33 AND L41
L43
             33 $ L33, L42
L44
              56 S L41 NOT L43
              9 S L43 AND (POLYLACT? OR LACTATE OR LACTIC OR POLYURETHANE OR UR
L45
              4 S L43 AND (POLYMETHACRYL? OR METHACRYL? OR ACRYL? OR POLYACRYL?
L46
             10 S L45, L46
L47
                 E POLYLACT/CT
                 E E10 ALL
                 E POLYLACT/CT
                 E E10+ALL
            763 S E1-E4
L48
                 E POLYLACT/CT
            779 S E8, E9, E11-E14
L49
                 E LACTIC/CT
L50
           1192 S E4-E8
                 E POLYURETHANE/CT
          42886 S E3-E57
L51
                 E. E3+ALL
L52
               5 S E2
                 E URETHANE/CT
L53
           3065 S E2-E31
                 E 43C/CC
                 Ε
                  43C6/CT
                 E 43C6/CC
L54
          24923 S E3
                 Ε
                  POLYAMIDE/CT
L55
          31153 S POLYAMIDE?/CT
                 E AMIDE/CT
L56
           6154 S E4-E12
                 E POLYBUTYLENE/CT
L57
           5067 S E37,E38
                 E BUTYLENE/CT
L58
            240 S E19-E22
                 E STYRENE/CT
                 E STYREN/CT
L59
          34219 S STYREN?/CT
                 E E24+ALL
           1354 S E2-E4
L60
                 E POLYSTYREN/CT
L61
          23648 S POLYSTYREN?/CT
                 E E4+ALL
           2080 S E2-E5
L62
                 E 42C21/CC
L63
          19658 S E3
                 E BUTADIENE/CT
```

L64

18287 S BUTADIENE?/CT

```
E POLYBUTADIENE/CT
L65
           7023 S POLYBUTADIENE?/CT
                 E E3+ALL
L66
           1550 S E2-E13
                 E ACRYLONITRILE/CT
L67
           5511 S E3-E33
                 E METHACRYLATE/CT
           6884 S E3-E39
L68
                 E POLYMETHACRYLATE/CT
L69
           3836 S E3-E15
                 E ACRYLIC/CT
          21679 S ACRYLIC?/CT
L70
                 E POLYACRYL/CT
                 E E3 9+ALL
                 E POLYACRYLATE/CT
                 E E3+ALL
L71
           4005 S E1-E3
                 E POLYACRYLIC ACID/CT
L72
           1932 S POLYACRYLIC ACID?/CT
                 E E3+ALL
L73
           1195 S 42C3411/CC
L74
             671 S L1, L2, L5, L6, L19, L23, L28 AND L48-L73
L75
             27 S L74 AND L34-L40
L76
              32 S L74 AND (PEST OR PESTIC? OR INSECT? OR AGRO? OR AGRI?)
              33 S L75, L76
L77
L78
              6 S L77 AND L43
L79
             10 S L47, L78
              50 S L43, L77 NOT L79
L80
                 SEL AN 2 5 11 13 17 37 39 41-50 L80
L81
             17 S L80 AND E1-E17
             27 S L79, L81
L82
              7 S L33 NOT L82
L83
                 SEL AN 1 4 7
              3 S L83 AND E18-E20
L84
L85
              30 S L82, L84
                 E POLYLACT/SHR
                 E E4+ALL
               2 S E3
L86
                E POLYLACT/SH
               7 S E4-E6
L87
                E LACT/SH
           1501 S E9-E13
F88
                 E LACT/SHR
L89
            427 S LACTIC?/SHR
                E POLYURETHANE/SH
L90
           3401 S E2-E5
                E POLYURETHANE/SHR
           3183 S E4-E12
L91
                 E URETHANE/SH
L92
          18620 S E3, E7
                E URETHANE/SHR
          12889 S URETHANE?/SHR
L93
                E URETHANE/SHR
                E URETHANES/SHR
                E POLYAMIDE/SH
           2143 S E3,E4
L94
                E POLYAMIDE/SHR
L95
           1900 S E4-E8
                E AMIDE/SH
L96
          10950 S E3,E8
                E AMIDE/SHR
L97
           8181 S AMIDE?/SHR
                 E POLYBUTYLENE/SH
```

```
L98
            304 S E3, E4
                 E POLYBUTYLENE/SHR
L99
            295 S E4,E5
                 E STYREN/SH
          22990 S E4-E19
L100
                 E STYREN/SHR
L101
          15444 S STYREN?/SHR
                 E POLYSTYREN/SH
            907 S E3,E4
L102
                 E POLYSTYREN/SHR
            846 S E4-E10
L103
                 E BUTADIENE/SH
L104
           9166 S E3-E6
                 E BUTADIENE/SHR
L105
           3283 S BUTADIENE?/SHR
                 E ACRYLONITRILE/SH
L106
           5775 S E3-E6
                 E ACRYLONITRILE/SHR
L107
           3795 S ACRYLONITRILE?/SHR
                 E METHACRL/SH
              8 S E2, E4, E7, E8, E9
L108
          12198 S METHACRYLAT?/SH
L109
           1222 S METHACRYLIC?/SH
L110
L111
              2 S POLYMETHACRYLIC?/SH
              0 S POLYMETHACRYLIC?/SHR
L112
L113
            470 S METHACRYLIC?/SHR
          12930 S (ACRYLIC? OR ACRYLAT?)/SH, SHR
L114
L115
           2628 S POLYESTER?/SH, SHR
                 E POLYESTER/SH
                 E POLYESTER/SHR
                E POLYCARBONATE/SH
            948 S E3,E4
L116
                 E CARBONATE/SH
L117
           7336 S E3,E6
                 E CARBONATE/SHR
L118
           4712 S CARBONATE?/SHR
            641 S POLYCARBONATE?/SHR
L119
            295 S L1, L2, L5, L6, L19, L23, L28 AND L86-L119
L120
               1 S L120 AND L34-L40
L121
               5 S L120 AND (PEST OR PESTIC? OR INSECT? OR AGRO? OR AGRI?)
L122
L123
               5 S L121, L122
                 SEL AN 3
L124
              1 S L123 AND E1
L125
              30 S L85, L124 AND L1-L124
                 E ANDERLIK R/AU
L126
                S E3
                 E KREMESKOTTER J/AU
L127
               1 S E3
                 E MAILAHN E/AU
L128
                S E3
                 E GUNTHERBERG N/AU
L129
                S E3
                 E GUENTHERBERG N/AU
              31 S E3
L130
                 E ITTEMAN P/AU
L131
               9 S E4
                 E HOFMAN J/AU
               4 S E3, E4
L132
L133
              36 S E28
                 E HOFFMAN J/AU
            158 S E3-E9
L134
                 E HOFFMANN J/AU
L135
              15 S E3-E6
```

```
E SACK H/AU
L136
              3 S E3
L137
            264 S L126-L136
L138
              0 S L137 AND L1, L2, L5, L6, L19, L23, L28
              1 S L126 AND L127-L136
L139
L140
              0 S L127 AND L128-L136
              7 S L129, L130 AND L131-L136
L141
              2 S L131 AND L132-L136
L142
              0 S L132-L135 AND L136
L143
L144
             10 S L139, L141, L142
                SEL AN 4 9 10
              7 S L144 NOT E1-E3
L145
L146
            173 S L137 AND THERMOPLAS?
              0 S L137 AND PHEROM?
L147
              3 S L137 AND (INSECT? OR PEST OR PESTIC? OR AGRO? OR AGRI? OR L34
L148
L149
              2 S L148 AND L146, L144
                SEL L146 AN 18 23 136
L150
              3 S L146 AND E4-E6
L151
             40 S L145, L150, L125
L152
             89 S L137 NOT L144, L146
L153
             40 S L151 AND L1-L152
```

FILE 'RAPRA' ENTERED AT 08:24:18 ON 04 JUN 2002

FILE 'PLASNEWS' ENTERED AT 08:24:51 ON 04 JUN 2002

E PHEROM

E ECOMON

FILE 'PLASPEC' ENTERED AT 08:25:13 ON 04 JUN 2002

E PHEROM

E ECOMON